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1   Special issue: AI in engineering
D. Sriram, R. Joobbani
April 1985 **ACM SIGART Bulletin**, Issue 92
Publisher: ACM Press
Full text available: 📄 pdf(8.79 MB)   Additional Information: full citation, abstract

The papers in this special issue were compiled from responses to the announcement in the July 1984 issue of the SIGART newsletter and notices posted over the ARPAnet. The interest being shown in this area is reflected in the sixty papers received from over six countries. About half the papers were received over the computer network.

2   A system architecture for the extension of structured information spaces by coordinated CSCW services
Peter Manhart
November 1999 **Proceedings of the international ACM SIGGROUP conference on Supporting group work**
Publisher: ACM Press
Full text available: 📄 pdf(1.76 MB)   Additional Information: full citation, abstract, references, index terms

The World Wide Web is an emerging platform for information systems; however established system architectures for web systems focus mainly on the creation and storage of consistent hypermedia information structures and on the efficient distribution of the resulting documents. The interaction between the information users is seldom supported.As many application scenarios profit greatly from human interaction, the paper presents a platform- and application-independent generic system ...

Keywords: CSCW services, group interaction, system architecture, web-based human interaction

3   Business process oriented information management: conceptual models at work
P. Peters, P. Szczurko, M. Jarke, M. Jeusfeld
August 1995 **Proceedings of conference on Organizational computing systems**
Publisher: ACM Press
Full text available: 📄 pdf(1.43 MB)   Additional Information: full citation, abstract, references, index terms

The reorganization of function-oriented, hierachically structured firms into interacting

business process networks of functional islands integrated by flow of material and information is a major challenge for a company that wants to meet the steadily changing business demands of today. As information has become an important production resource during the last decades, the reorganization of information management has to accompany organizational restructuring. In this paper we propose ...

4 Disertation Abstracts

May 1988 **ACM SIGIR Forum**, Volume 22 Issue 3-4

Publisher: ACM Press

Full text available: pdf(1.85 MB)   Additional Information: full citation

5 Reverse engineering: a roadmap

Hausi A. Müller, Jens H. Jahnke, Dennis B. Smith, Margaret-Anne Storey, Scott R. Tilley, Kenny Wong

May 2000 **Proceedings of the Conference on The Future of Software Engineering**

Publisher: ACM Press

Full text available: pdf(1.53 MB)   Additional Information: full citation, references, citings, index terms

Keywords: data reverse engineering, program comprehension, program understanding, reverse engineering, software analysis, software engineering, software evolution, software maintenance, software migration, software reengineering, software tools, tool adoption, tool evaluation

6 SRI workshop summary: "domain analysis in the DoD"

Frank Svoboda, Fred Maymir-Ducharme, Jeff Poulin

January 1996 **ACM SIGSOFT Software Engineering Notes**, Volume 21 Issue 1

Publisher: ACM Press

Full text available: pdf(1.40 MB)   Additional Information: full citation, abstract

The Workshop on "Domain Analysis in the DoD," sponsored by the Software Reuse Initiative (SRI) and Defense Information Systems Agency (DISA), was held at MITRE Corporation, in McLean, Virginia on 26 - 27 September 1995. The primary purpose of the workshop was to discuss issues related to identifying and scoping domains with emphasis on product lines and to assess the usefulness of the strawman SRI Domain Scoping Framework as a proposed basis for this scoping activity. To this end, two specific o ...

7 A query service for a software engineering database system

Mohamed Tedjini, Ian Thomas, Guy Benoliel, Fernando Gallo, Régis Minot

October 1990 **ACM SIGSOFT Software Engineering Notes , Proceedings of the fourth ACM SIGSOFT symposium on Software development environments SDE 4**, Volume 15 Issue 6

Publisher: ACM Press

Full text available: pdf(1.23 MB)   Additional Information: full citation, abstract, references, citings, index terms

The PCTE interfaces define a Public Tool Interface intended to serve as a basis for the construction of integrated software engineering environments (SEEs). The interfaces include Object Management System (OMS) services that manage the data repository of the environment. The OMS is based on a binary Entity-Relationship model. This paper describes a query service constructed on the PCTE interfaces. Following a brief summary of the OMS features that are necessary to understand the ...

8 Contemporary software development environments

William E. Howden

May 1982 **Communications of the ACM**, Volume 25 Issue 5

Publisher: ACM Press

Full text available: pdf(1.22 MB)   Additional Information: full citation, abstract, references, citings, index terms

There are a wide variety of software development tools and methods currently available or which could be built using current research and technology. These tools and methods can be organized into four software development environments, ranging in complexity from a simple environment containing few automated tools or expensive methods to a complete one including many automated tools and built around a software engineering database. The environments were designed by considering the life-cycle ...

9 An analysis of geometric modeling in database systems

Alfons Kemper, Mechtild Wallrath

March 1987 **ACM Computing Surveys (CSUR)**, Volume 19 Issue 1

Publisher: ACM Press

Full text available: pdf(2.95 MB)   Additional Information: full citation, abstract, references, citings, index terms, review

The data-modeling and computational requirements for integrated computer aided manufacturing (CAM) databases are analyzed, and the most common representation schemes for modeling solid geometric objects in a computer are described. The *primitive instancing* model, the *boundary representation,* and the *constructive solid geometry* model are presented from the viewpoint of database representation. Depending on the representation scheme, one can apply geometric transformation ...

10 Building Energy Analysis Programs

Henry Lau, J. Marx Ayres

December 1979 **Proceedings of the 11th conference on Winter simulation - Volume 1**

Publisher: IEEE Press

Full text available: pdf(521.55 KB)   Additional Information: full citation, abstract, references, index terms

Building Energy Analysis Computer Programs consist of Loads, Systems, Plant, and Economic sub-programs. They are used by engineers and architects in the design and analysis of energy efficient building envelopes, heating, ventilating, and air conditioning, electrical and other service systems. The historical development of energy analysis programs is presented, the methodologies used in various programs are compared, and areas for future improvements are discussed.

11 1.1 gender and the IT profession: Constructing the IT skills shortage in Canada: the implications of institutional discourse and practices for the participation of women

Wendy Cukier

April 2003 **Proceedings of the 2003 SIGMIS conference on Computer personnel research: Freedom in Philadelphia--leveraging differences and diversity in the IT workforce**

Publisher: ACM Press

Full text available: pdf(212.56 KB)   Additional Information: full citation, abstract, references

Building on previous work, this paper explores systemic barriers to women in information technology professions by focusing on the ways in which institutional practices reinforce a definition of "information technology professional" that tends to exclude women. It examines the recent discourse on the "Information Technology Skills Shortage" in selected texts from industry, professional associations, academia and programs aimed at increasing the participation of women, focusing on the implication ...

12 Computer science education in a Saudi Arabian university: a comparative study of its B.Sc. program

Abdulmalik S. Al-Salman, Jacob Adeniyi

December 2000 **ACM SIGCSE Bulletin**, Volume 32 Issue 4

Publisher: ACM Press

Full text available: pdf(813.83 KB)   Additional Information: full citation, abstract, index terms

> The computer science curriculum at a university in the Kingdom of Saudi Arabia is described and then compared to with the CSAC/ABET accreditation criteria. The comparison is needed to determine the relevance of the curriculum in view of the dynamism and perturbations arising from the reality of the real world and CSAC/ABET criteria. The curriculum emphasizes breadth and depth in the main areas of computer science education and makes systems and systems development as its main subject area of exp ...

Results 1 - 12 of 12

Views of SDE: automation of engineering and engineering of automation

Full text   🗎 Pdf (1.06 MB)

Author   W. Stinson Pacific Bell, 2600 Camino Ramon, 3N850P, San Ramon, CA

Publisher   ACM Press   New York, NY, USA

Additional Information: abstract   index terms   peer to peer

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↑ ABSTRACT

This paper develops an abstract model of software development and then explores its implications for software development environments (SDEs). It explores the automation of engineering, i.e., *what* to automate, and the engineering of automation, i.e., *how* to automate. It explains the automation of engineering by deriving basic automation paradigms from the development model. It explains the engineering of automation in terms of principles which guide the architecture of an SDE.

↑ INDEX TERMS

Primary Classification:
  D. Software
   ↳ **D.2** SOFTWARE ENGINEERING

Additional Classification:
  K. Computing Milieux
   ↳ **K.6** MANAGEMENT OF COMPUTING AND INFORMATION SYSTEMS
     ↳ **K.6.3** Software Management
       ↳ **Subjects:** Software development

General Terms:
Design

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  Communications of the ACM 28, 9
  Hanan Samet

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  Kim S. Lee , Huizhu Lu , D. D. Fisher

- The GemStone object database management system
  Communications of the ACM 34, 10
  Paul Butterworth , Allen Otis , Jacob Stein

- Putting innovation to work: adoption strategies for multimedia communication systems
  Communications of the ACM 34, 12
  Ellen Francik , Susan Ehrlich Rudman , Donna Cooper , Stephen Levine

- An intelligent component database for behavioral synthesis
  Proceedings of the 27th ACM/IEEE conference on Design automation
  Gwo-Dong Chen , Daniel D. Gajski

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Automated distributed system testing: designing an RTI verification system

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Proceedings of the 31st conference on Winter simulation: Simulation—a bridge to the future - Volume 2 table of contents
Phoenix, Arizona, United States
Pages: 1094 - 1102
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               ACM: Association for Computing Machinery

Publisher ACM Press New York, NY, USA

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↑ REFERENCES

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1   William A. Barrett , Rodney M. Bates , David A. Gustafson , John D. Couch, Compiler construction: theory and practice (2nd ed.), SRA School Group, 1986

2   Carothers, C.D., Fujimoto, R.M., Weatherly, R.M., and Wilson, A.L. 1997. Design and Implementation of HLA Time Management in the RTI Version F.0, In Proceedings of the 1997 Winter Simulation Conference, ed. S. Androdottir, K.J. Healy, D.H. Withers, and B.L. Nelson, 373-380. Institute of Electrical and Electronics Engineers, Piscataway, New Jersey.

3   Chang, J., Richardson, D.J., and Sankar S. 1995. Automated Test Selection from ADL Specifications, in First California Software Symposium (CSS'95), March.

4   Judith S. Dahmann, High Level Architecture for Simulation, Proceedings of the 1st International Workshop on Distributed Interactive Simulation and Real-Time Applications, p.9, January 09-10, 1997

5   Judith Dahmann , Richard M. Fujimoto , Richard M. Weatherly, The DoD high level architecture: an update, Proceedings of the 30th conference on Winter simulation, p.797-804, December 13-16, 1998, Washington, D.C., United States

6   Defense Modeling and Simulation Office. 1998a. High Level Architecture Interface Specification, v1.3.

7   Defense Modeling and Simulation Office. 1998b. High Level Architecture Object Model Template, v1.3.

8   Defense Modeling and Simulation Office. 1998c. High Level Architecture Rules, v1.3.

9   DeVale, J., Koopman, P., and Guttendorf, D. 1999. The Ballista Software Robustness Testing Service. To appear in Testing Computer Software '99, June.

10   Fernsler, K., and Koopman, P. 1999. Ballista Robustness Testing of the HLA RTI v.1.0.3 Preliminary Report. Carnegie Mellon University Report, at http://www.ices.cmu.edu/ballista/reports/ hla_rti_1_0_3.pdf

11   Ernest H. Page , Bradford S. Canova , John A. Tufarolo, A case study of verification, validation, and accreditation for advanced distributed simulation, ACM Transactions on Modeling and Computer Simulation (TOMACS), v.7 n.3, p.393-424, July 1997

12   Pratik Patel , Karl Moss, Java database programming with JDBC, Coriolis Group Books, Scottsdale, AZ, 1996

13   Saxon, W.G., and Leathrum, J.F. 1998. Survery of testing tools, Informal Briefing.

14   Sun Microsystems Incorporated. 1999a. Java Compiler Compiler - The Java Parser Generator, at http://www.suntest.com/JavaCC

15   Sun Microsystems Incorporated. 1999b. JJTree Introduction, at http://www.suntest.com/JavaCC/DOC/JJTree.html

16   Sun Microsystems Incoporated. 1999c. Java Remote Method Invocation (RMI), at http://java.sun.com/ products/jdk/rmi

17   John Tufarolo , Jeff Nielsen , Susan Symington , Richard Weatherly , Annette Wilson , Timothy C. Hyon, Automated distributed system testing: designing an RTI verification system, Proceedings of the 31st conference on Winter simulation: Simulation---a bridge to the future, p.1094-1102, December 05-08, 1999, Phoenix, Arizona, United States

18   U.S. Department of Defense. 1996. DoD High Level Architecture (HLA) for Simulations. U.S. Departement of Defense. Memorandum signed by USD(A&T).

19   Linda Voss, A Revolution in Simulation: Distributed Interaction in the '90s and Beyond, Pasha Publications, Incorporated, 1993

20   Weatherly, R.M., Wilson, A.L., Canova, B.S., Page, E.H., Zabek, A.A., and Fischer, M.C. 1996. Proceedings of the 29 th Havaii International Conference on Systems Sciences, Volume 1 (Wailea, HI, Jan. 3-6), 407-415.

↑ **CITINGS 2**

Annette Wilson , James Ivers , Timothy C. Hyon , John Tufarolo , Jeff Nielsen , Susan Symington , Richard Weatherly, Automated distributed system testing: application of an RTI verification system, Proceedings of the 31st conference on Winter simulation: Simulation----a bridge to the future, p.1103-1108, December 05-08, 1999, Phoenix, Arizona, United States

John Tufarolo , Jeff Nielsen , Susan Symington , Richard Weatherly , Annette Wilson , Timothy C. Hyon, Automated distributed system testing: designing an RTI verification system, Proceedings of the 31st conference on Winter simulation: Simulation----a bridge to the future, p.1094-1102, December 05-08, 1999, Phoenix, Arizona, United States

↑ INDEX TERMS

Primary Classification:
J. Computer Applications

↳ **J.1** ADMINISTRATIVE DATA PROCESSING

↳ **Subjects:** Military

Additional Classification:
D. Software

↳ **D.3** PROGRAMMING LANGUAGES

↳ **D.3.2** Language Classifications

↳ **Nouns:** SDL

I. Computing Methodologies

↳ **I.6** SIMULATION AND MODELING

General Terms:
Design, Human Factors, Languages, Management, Performance, Theory, Verification

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1   Automated distributed system testing: designing an RTI verification system   ▰
❖ John Tufarolo, Jeff Nielsen, Susan Symington, Richard Weatherly, Annette Wilson, Timothy C. Hyon
December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation---a bridge to the future - Volume 2**
Publisher: ACM Press
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2   Configuration management & security: Automating experimentation on distributed   ▰
❖ **testbeds** ·
Yanyan Wang, Matthew J. Rutherford, Antonio Carzaniga, Alexander L. Wolf
November 2005 **Proceedings of the 20th IEEE/ACM international Conference on Automated software engineering ASE '05**
Publisher: ACM Press
Full text available: 📄 pdf(237.53 KB)   Additional Information: full citation, abstract, references, index terms

Engineering distributed systems is a challenging activity. This is partly due to the intrinsic complexity of distributed systems, and partly due to the practical obstacles that developers face when evaluating and tuning their design and implementation decisions. This paper addresses the latter aspect, providing techniques for software engineers to automate the experimentation activity. Our approach is founded on a suite of models that characterize the distributed system under experimentation, the ...

Keywords: PlanetLab, distributed systems, experiment automation, wide-area testbeds

3   Programming languages and object technologies: Automated assembly of software   ▰
❖ **components based on XML-coded instructions**
Ian Nunn, Dwight Deugo
March 2002 **Proceedings of the 2002 ACM symposium on Applied computing**
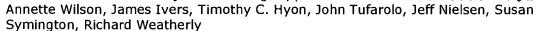**Publisher:** ACM Press
Full text available: 📄 pdf(476.40 KB)   Additional Information: full citation, abstract, references, citings, index terms

Many approaches to reducing the cost, complexity and development time of software applications have been explored. Several techniques, most recently the Object Oriented

paradigm, have been developed to facilitate the reuse of code. Even when these techniques employ the notion of components, they do so only in a limited way within the language's environment at development time. Within the field of Software Engineering, the study of Software Architecture has emerged to provide language support for ...

Keywords: XML, architecture definition language, component, software architecture, software components

4 Automated distributed system testing: application of an RTI verification system

Annette Wilson, James Ivers, Timothy C. Hyon, John Tufarolo, Jeff Nielsen, Susan Symington, Richard Weatherly
December 1999 **Proceedings of the 31st conference on Winter simulation: Simulation---a bridge to the future - Volume 2**
Publisher: ACM Press
Full text available: pdf(65.83 KB)   Additional Information: full citation, references, index terms

5 Automating first-order relational logic

Daniel Jackson
November 2000 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 8th ACM SIGSOFT international symposium on Foundations of software engineering: twenty-first century applications SIGSOFT '00/FSE-8,** Volume 25 Issue 6
Publisher: ACM Press
Full text available: pdf(1.01 MB)   Additional Information: full citation, abstract, references, citings, index terms

An automatic analysis method for first-order logic with sets and relations is described. A first-order formula is translated to a quantifier-free boolean formula, which has a model when the original formula has a model within a given scope (that is, involving no more than some finite number of atoms). Because the satisfiable formulas that occur in practice tend to have small models, a small scope usually suffices and the analysis is efficient.

The paper presents a simple logic and giv ...

Keywords: SAT solvers, Z specification, automatic analysis, constraint solvers, first-order logic, model finding, object models, relational logic

6 Automation support for software performance engineering

Hesham El-Sayed, Don Cameron, Murray Woodside
June 2001 **ACM SIGMETRICS Performance Evaluation Review , Proceedings of the 2001 ACM SIGMETRICS international conference on Measurement and modeling of computer systems SIGMETRICS '01**, Volume 29 Issue 1
Publisher: ACM Press
Full text available: pdf(1.14 MB)   Additional Information: full citation, abstract, references, citings

To evaluate the performance of a software design one must create a model of the software, together with the execution platform and configuration. Assuming that the "platform": (processors, networks, and operating systems) are specified by the designer, a good "configuration" (the allocation of tasks to processors, priorities, and other aspects of the installation) must be determined. Finding one may be a barrier to rapid evaluation; it is a more serious barrier if there are many platforms to be ...

7 Views of SDE: automation of engineering and engineering of automation

W. Stinson
October 1989 **ACM SIGSOFT Software Engineering Notes**, Volume 14 Issue 6
Publisher: ACM Press
Full text available: pdf(1.06 MB)   Additional Information: full citation, abstract, index terms

This paper develops an abstract model of software development and then explores its implications for software development environments (SDEs). It explores the automation of engineering, i.e., *what* to automate, and the engineering of automation, i.e., *how* to automate. It explains the automation of engineering by deriving basic automation paradigms from the development model. It explains the engineering of automation in terms of principles which guide the architecture of an SDE.

8 Future of simulation: Simulation in the international IMS MISSION project: the IMS MISSION architecture for distributed manufacturing simulation
Charles McLean, Frank Riddick
December 2000 **Proceedings of the 32nd conference on Winter simulation**
Publisher: Society for Computer Simulation International
Full text available: pdf(269.47 KB)   Additional Information: full citation, abstract, references, citings

This paper presents an overview of a neutral reference architecture for integrating distributed manufacturing simulation systems with each other, with other manufacturing software applications, and with manufacturing data repositories. Other manufacturing software applications include, but are not limited to systems used to: 1) design products, 2) specify processes, 3) engineer manufacturing systems, and 4) manage production. The architecture identifies the software building blocks and interface ...

9 Full papers: Self-organising software architectures for distributed systems
Ioannis Georgiadis, Jeff Magee, Jeff Kramer
November 2002 **Proceedings of the first workshop on Self-healing systems**
Publisher: ACM Press
Full text available: pdf(98.93 KB)   Additional Information: full citation, abstract, references, citings

A self-organising software architecture is one in which components automatically configure their interaction in a way that is compatible with an overall architectural specification. The objective is to minimise the degree of explicit management necessary for construction and subsequent evolution whilst preserving the architectural properties implied by its specification. This paper examines the feasibility of using architectural constraints as the basis for the specification, design and implemen ...

Keywords: constraints, self-configuring, software architecture

10 Design and performance modeling of component interconnection patterns for distributed software architectures
Hassan Gomaa, Daniel A. Menascé
September 2000 **Proceedings of the 2nd international workshop on Software and performance WOSP '00**
Publisher: ACM Press
Full text available: pdf(276.11 KB)   Additional Information: full citation, references, citings, index terms

Keywords: UML, XML, component interconnection patterns, performance model, queuing networks, software architecture

11 An architectural style of product lines for distributed processing systems, and practical selection method

Yoshitomi Morisawa, Koji Torii

September 2001 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 8th European software engineering conference held jointly with 9th ACM SIGSOFT international symposium on Foundations of software engineering ESEC/FSE-9**, Volume 26 Issue 5

Publisher: ACM Press

Full text available: pdf(284.13 KB)   Additional Information: full citation, abstract, references, index terms

When implementing an application system in a distributed computing environment, several architectural questions arise, such as how and where computing resources are arranged, and how the communication among computing resources are implemented. To simplify the process of making these choices, we have developed an architectural style for distributed processing system. The style classifies product lines for distributed processing systems into nine categories based on the location of data storage an ...

Keywords: architectural style, distributed computing model, distributed processing system, product lines, software architecture

12 Distributed software architectures (tutorial)

Jeff Kramer, Jeff Magee

May 1997 **Proceedings of the 19th international conference on Software engineering**

Publisher: ACM Press

Full text available: pdf(311.35 KB)   Additional Information: full citation, references, index terms

Keywords: architecture description language, component composition

13 Reusable component interconnection patterns for distributed software architectures

Hassan Gomaa, Daniel A. Menascé, Michael E. Shin

May 2001 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 2001 symposium on Software reusability: putting software reuse in context SSR '01**, Volume 26 Issue 3

Publisher: ACM Press

Full text available: pdf(181.77 KB)   Additional Information: full citation, abstract, references, citings, index terms

This paper investigates the design of reusable component interconnection in client/ server systems. In particular, the paper describes the design of component interconnection patterns, which define and encapsulate the way client and server components communicate with each other. This paper uses the Unified Modeling Language (UML) to describe the component interconnection patterns for synchronous, asynchronous, and brokered communication. When designing a new distributed application, the app ...

Keywords: UML, client/server systems, distributed applications, patterns, software architecture, software component, software reuse

14 Education & training track: Software engineering education in the era of outsourcing, distributed development, and open source software: challenges and opportunities

Matthew J. Hawthorne, Dewayne E. Perry

May 2005 **Proceedings of the 27th international conference on Software engineering**

Publisher: ACM Press

Full text available: ▩ pdf(158.46 KB)   Additional Information: full citation, abstract, references, index terms

As software development becomes increasingly globally distributed, and more software functions are delegated to common open source software (OSS) and commercial off-the-shelf (COTS) components, practicing software engineers face significant challenges for which current software engineering curricula may leave them inadequately prepared. A new multi-faceted distributed development model is emerging that effectively commoditizes many development activities once considered integral to software engi ...

15 ESEC/FSE 2005: Engineering distributed software: a structural discipline   ▩

Jeff Kramer, Jeff Magee

September 2005 **ACM SIGSOFT Software Engineering Notes , Proceedings of the 10th European software engineering conference held jointly with 13th ACM SIGSOFT international symposium on Foundations of software engineering ESEC/FSE-13**, Volume 30 Issue 5

Publisher: ACM Press

Full text available: ▩ pdf(225.76 KB)   Additional Information: full citation, abstract, references, index terms

The role of structure in specifying, designing, analysing, constructing and evolving software has been the central theme of our research in Distributed Software Engineering. This structural discipline dictates formalisms and techniques that are compositional, components that are context independent and systems that can be constructed and evolved incrementally. This extended abstract overviews our development of a structural approach to engineering distributed software and gives indications of ou ...

Keywords: configuration programming, distributed software engineering, dynamic configuration, evolution, software architecture, software components, structure

16 Engineering distributed objects (EDO 99) workshop summary   ▩

Wolfgang Emmerich, Volker Gruhn

May 1999 **Proceedings of the 21st international conference on Software engineering**

Publisher: IEEE Computer Society Press

Full text available: ▩ pdf(245.77 KB)   Additional Information: full citation, index terms

17 State-of-the-art presentations: Distributed component technologies and their software ▩
engineering implications

Wolfgang Emmerich

May 2002 **Proceedings of the 24th International Conference on Software Engineering**

Publisher: ACM Press

Full text available: ▩ pdf(1.27 MB)   Additional Information: full citation, abstract, references, citings, index terms

In this state of the art report, we review advances in distributed component technologies, such as the Enterprise Java Beans specification and the CORBA Component Model. We assess the state of industrial practice in the use of distributed components. We show several architectural styles for whose implementation distributed components have been used successfully. We review the use of iterative and incremental development processes and the notion of model driven architecture. We then assess the st ...

18 Mobility: Architectural primitives for distribution and mobility   ▩

Antónia Lopes, José Luiz Fiadeiro, Michel Wermelinger

November 2002 **Proceedings of the 10th ACM SIGSOFT symposium on Foundations of**

software engineering
Publisher: ACM Press

Full text available: pdf(136.18 KB)   Additional Information: full citation, abstract, references, citings, index terms

In this paper, we address the integration of a distribution dimension in an architectural approach to system development and evolution based on the separation between coordination and computation. This third dimension allows us to separate key concerns raised by mobility, thus contributing to our ability to handle the complexity that is inherent to systems required to operate in "Internet time and space".

Keywords: coordination, mobility, software architectures

19 Transitioning a model-based software engineering architectural style to Ada 95
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↑ ABSTRACT

This paper develops an abstract model of software development and then explores its implications for software development environments (SDEs). It explores the automation of engineering, i.e., *what* to automate, and the engineering of automation, i.e., *how* to automate. It explains the automation of engineering by deriving basic automation paradigms from the development model. It explains the engineering of automation in terms of principles which guide the architecture of an SDE.

↑ INDEX TERMS

Primary Classification:
  D. Software
  ↳ **D.2** SOFTWARE ENGINEERING

Additional Classification:
  K. Computing Milieux
  ↳ **K.6** MANAGEMENT OF COMPUTING AND INFORMATION SYSTEMS
    ↳ **K.6.3** Software Management
      ↳ **Subjects:** Software development

General Terms:
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